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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,779

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Kikuo Maeda

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EXAMINER

YANG, JIE

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

01/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,779	Applicant(s) MAEDA ET AL.	
	Examiner JIE YANG	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-19 is/are pending in the application.
- 4a) Of the above claim(s) 11, 12 and 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim 6 has been cancelled; claims 1 and 7 have been amended; claims 11, 12, and 17-19 are withdrawn as non-elected claims; and claims 1-5, 7-10, and 13-16 are active in application.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-5, 7, 8 and 10, are rejected under 35 U.S.C. 102(b) as being anticipated by Japan patent publication 09-296214, thereafter JP'214 (With machine translation document).

JP'214 is applied to claims 1-5, 7, 8, and 10 for the same reason as stated in the previous office action marked 7/10/2008.

Regarding the newly added limitation in the instant claim 1, JP'214 teaches "quenching" to obtain a martensitic structure (Paragraph [0054]-[0057] of JP'214) and JP'214 further teaches: after carrying out rapid cooling of the processed material, the molding heated material heating and holding to a desired temperature in order to bainitize the process material (Paragraph [0021] of JP'214), which reads on the tempering limitations as recited in the instant claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 13-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'214 in view of Grell et al (US 6,682,227 B2, thereafter, US'227).

JP'214 in view of US'227 is applied to claims 9 and 13-16 for the same reason as stated in the previous office action marked 7/10/2008.

Response to Arguments

Applicant's arguments filed 10/10/2008 have been fully considered but they are not persuasive.

The Applicant's arguments filed on 7/24/2008 with respect to claims 1-5, 7-10, and 13-16: Regarding rejection under 35 U.S.C. 102(b), JP'214 does not identically disclose a manufacturing method of a thin component including all the limitations recited in independent claim 1 because A) the term "quenching" means heating steel to an austenitic structure and then rapidly cooling it in any of various types of cooling media, in order to generate a martensitic structure (See Illustrate dictionary of Engineering term

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for metal, 543 and translation in Exhibit A). In contrast, JP'214 teaches rapid cooling for bainitic structure. B) the term “tempering” refers to an operation of heating the martensitic structure generated by quenching of steel to a temperature equal to or lower than A1 point, and cooling the same.

In response, firstly, the Examiner notices JP'214 teaches “quenching” to obtain a martensitic structure (Paragraph [0054]-[0057] of JP'214). Secondly, as pointed out in the “Wikipedia, the free encyclopedia”, “Quench” refers to a rapid cooling; and in Metallurgy, it is commonly used to harden steel by introducing martensite. However it does not exclude the uncommon use as JP'214, for example in some of JP'214's processes, quenching while holding at a certain temperature (Abstract of JP'214). Regarding the “tempering” process, because JP'214 teaches “quenching” to obtain a martensitic structure and JP'214 further teaches: after carrying out rapid cooling of the processed material, the molding heated material heating and holding to a desired temperature in order to bainitize the process material (Paragraph [0021] of JP'214), which reads on the tempering process as recited in the instant claim (refer to the definition of term tempering in the “Wikipedia, the free encyclopedia”).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY

/Roy King/
Supervisory Patent Examiner, Art Unit 1793